



SD 3.01 | SD Card

SMART's high performance, industrial grade SD 3.01 Memory Cards support OEM markets such as networking, telecommunications and data communications, embedded computing, medical, automotive, and industrial applications. Offered in SLC NAND Flash, the SD 3.01 SD Cards are available in capacities from 1GB to 32GB.

SMART's SD 3.01 SD Cards comply with SD v3.01 SDSC, SDHC and SDXC Standard. Incorporating onboard error detection and correction algorithms, and static and dynamic wear-leveling techniques, the SD 3.01 SD Cards ensure years of reliable operation over a product's life.



Features & Benefits

- Capacities from 1GB to 32GB
- Low Power Dissipation
- Onboard Wear-Leveling
- RoHS Compliant
- Support C-Temp, E-Temp & I-Temp

Applications

- Airline Entertainment Systems
- Automotive Telematics, Navigation and Infotainment
- Defense
- Digital Commercial Camcorders
- Embedded Computing
- Gaming
- Industrial Meters and Industrial Control
- Networking
- Telecom and Communications

Product Family Overview

Form Factor	Capacity	Sequential Performance
SD 3.01 SD Card	1GB to 32GB	Up to 98MB/s Read Up to 75MB/s Write

Specifications

SD 3.01 SD Card	
NAND Type	SLC
Performance	
Sequential Read/Write (maximum) (Based on SDR104 (UHS-I, 1.8V, 208MHz))	Read up to 98MB/s Write up to 75MB/s
Reliability	
MTBF	> 3,000,000 hours
Data Reliability	< 1 Non-Recoverable Error in 10 ¹⁴ bits read
Data Retention	10 years >90% life remaining 1 year at the end of life
Endurance (Sequential workload)	32GB: 1620TBW
	16GB: 800TBW
	8GB: 400TBW
	4GB: 200TBW
	2GB: 180TBW
1GB: 90TBW	
Power	
Vcc	2.7V – 3.6V
Read	<160mA
Write	<253mA
Idle	<270µA
Environmental	
Shock (operational)	1500G half-sine, 0.5 msec, 1 shock along each axis, X, Y, Z in each direction
Vibration	15g rms 10-2000 Hz, 3 axis
Operating Temperature	Commercial: 0°C to +70°C
	Extended: -25°C to +85°C
	Industrial: -40°C to +85°C
Storage Temperature	-40°C to +85°C
Humidity	5% to 95%, non-condensing, relative humidity
Physical	
Length	32.0mm
Width	24.0mm
Thickness	2.1mm
Weight	2.0g

Ordering Information

Part Number	Density
SD 3.01 SD Card	
Commercial Operating Temperature (0°C to +70°C)	
SH9SD032GSNIDSC02	32GB
SH9SD016GSNICSC02	16GB
SH9SD008GSNICSC02	8GB
SH9SD004GSMIBSC02	4GB
SP9SD002GPB9SC01	2GB
SP9SD001GPB8SC01	1GB
SD 3.01 SD Card	
Industrial Operating Temperature (-40°C to +85°C)	
SH9SD032GSNIDSIO2	32GB
SH9SD016GSNICSI02	16GB
SH9SD008GSNICSI02	8GB
SH9SD004GSMIBSI02	4GB
SP9SD002GPB9SIO1	2GB
SP9SD001GPB8SIO1	1GB
SD 3.01 SD Card	
Extended Operating Temperature (-25°C to +85°C)	
SP9SD002GPB9SE01	2GB
SP9SD001GPB8SE01	1GB



For more information, please visit: www.smartm.com

*Product images are for promotional purposes only. Labels may not be representative of the actual product.

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